CLAIMS

1.   A method of controlling a compression unit which outputs a compressed bit-stream, the method comprising the steps of supplying to a reference input of the compression unit, a transport stream input with a sequence of transport packets; nominating a set of the transport packets as reference packets and arranging for the compression unit to output packets in alignment with the reference packets.

2.   A method according to Claim 1, wherein the transport stream comprises a multi-programme transport stream and wherein the nominated set of transport packets comprises those packets associated with a selected programme.

3.   A method according to Claim 2, wherein the nominated set of transport packets comprises sub-sets of packets, those sub-sets being associated with respective elementary streams of the selected programme.

4.   A method according to Claim 1, wherein each compression unit is arranged to output packets having at least one parameter determined by the reference packet with which it is in alignment.

5.   A method according to Claim 4, wherein said parameter is a clock reference.

6.   A method according to Claim 4, wherein said parameter is the location of a frame start.

7.   A method according to Claim 4, wherein said parameter is a time stamp.

8.   A method according to Claim 4, wherein said parameter is a delay value.

9.   A method of replacing a programme within a multi-programme transport stream by the output of a programme compression unit, comprising the steps of supplying the multi-programme transport stream to a reference input of the compression unit, nominating as reference packets those packets which are

associated with the programme to be replaced; arranging for the compression unit to output packets in alignment with the reference packets; and re-multiplexing the output of a programme compression unit with the remaining packets of the multi-programme transport stream.

10. A method according to Claim 9, wherein the programme compression unit comprises a compression encoder receiving an uncompressed input.

11. A method according to Claim 9, wherein the programme compression unit comprises a compression transcoder receiving a compressed input.

12. A method according to Claim 9, wherein each compression unit is arranged to output packets having at least one parameter determined by the reference packet with which it is in alignment.

13. A method according to Claim 12, wherein said parameter is a clock reference.

14. A method according to Claim 12, wherein said parameter is the location of a frame start.

15. A method according to Claim 12, wherein said parameter is a time stamp.

16. A method according to Claim 12, wherein said parameter is a delay value.

17. Apparatus for replacing a programme within a multi-programme transport stream by the output of a programme compression unit, comprising a compression unit having a reference input; means for supplying the multi-programme transport stream to said reference input and nominating as reference packets those packets which are associated with the programme to be replaced; the compression unit being arranging to output packets in alignment with the reference packets; and a re-multiplexer for re-multiplexing the output of a programme compression unit with the multi-programme transport stream.

18. Apparatus according to Claim 17, wherein the programme compression unit comprises a compression encoder receiving an uncompressed input.

19. Apparatus according to Claim 17, wherein the programme compression unit comprises a compression transcoder receiving a compressed input.

20. Apparatus according to Claim 17, wherein each compression unit is arranged to output packets having at least one parameter determined by the reference packet with which it is in alignment.

21. Apparatus according to Claim 20, wherein said parameter is a clock reference.

22. Apparatus according to Claim 20, wherein said parameter is the location of a frame start.

23. Apparatus according to Claim 20, wherein said parameter is a time stamp.

24. Apparatus according to Claim 20, wherein said parameter is a delay value.

25. A method of controlling a plurality of compression units which each output a compressed bit-stream, the method comprising the steps of supplying to a reference input of each of the compression units, a transport stream input with a sequence of transport packets; nominating a different set of the transport packets as reference packets for each of the respective compression units and arranging for each compression unit to output packets in alignment with the reference packets nominated for that compression unit.

26. A method according to Claim 25, wherein some or all of the compression units comprise a compression encoder receiving an uncompressed input.

27. A method according to Claim 25, wherein some or all of the compression units comprise a compression transcoder receiving a compressed input.

28. A method according to Claim 25, wherein the relative occurrences of the different sets of packets in the transport stream input are varied to control the relative bit rates of the respective compression unit outputs.

29. A method according to Claim 28, wherein the activity of each compression unit is monitored to inform said control of relative bit rates.

30. A method according to Claim 25, wherein the outputs of the respective compression units are combined to form a multi-programme transport stream in which the overall bit rate and the instantaneous allocation of that bit rate amongst the programme transport streams is defined by said transport stream reference.

31. A method according to Claim 30, wherein the outputs of the respective compression units are combined by OR'ing.

32. Apparatus for forming a multi-programme transport stream having a fixed overall bit rate and in which the instantaneous allocation of that bit rate amongst the programme transport streams is controllable, comprising a plurality of programme compression units each having a reference input; a controller which generates a transport stream reference having sets of reference packets associated respectively with the respective compression units, in which the relative occurrence of packets of the respective sets reflects the desired instantaneous allocation of that bit rate amongst the programme transport streams, each compression unit receiving the transport stream reference and being arranged to output packets in alignment with the reference packets associated with that compression unit and a multiplexer which combines the outputs of the respective programme compression units to from a multi-programme transport stream.

33. Apparatus according to Claim 32, wherein the programme compression unit comprises a compression encoder receiving an uncompressed input.

34. Apparatus according to Claim 32, wherein the programme compression unit comprises a compression transcoder receiving a compressed input.